

REMARKS

Claims 1, 2, 4, 5, 8, 12 and 20-35 are pending.

Claims 3, 6, 7, 9-11 and 13-19 have been canceled.

The claims have been separated into two basic groups, i.e., the first group which is curable by a hydrosilylation reaction comprising claims 1, 2, 4, 5, 8, 12 and 20-24 and the second group which is curable by a condensation reaction comprising claims 25-35.

Claims 1 and 22 have been amended to recite that the curing agent is an organohydrogenpolysiloxane which finds support at page 6, line 5 et seq. Claims 1 and 22 have also been amended to recite an addition reaction catalyst which finds support at page 7, line 19 et seq.

New claims 24 and 28 find support in claim 1.

New claims 25-27 and 29-35 find support in claims 1, 2, 5, 20, 21, 4, 8, 12, 22 and 23.

No new matter has been added by way of the above-amendment.

[I] Issues under 35 U.S.C. §103

The following rejections are pending:

(A) Claims 1-5, 8-9, 16-17 and 19-23 are rejected under 35 USC 103(a) as being unpatentable over Torto (WO 00/61074); and

(B) Claims 1-2, 4, 7-8, 11-13, 15-16, 19 and 22-23 are rejected under 35 USC 103(a) as being unpatentable over Nitzsche (US 3070566) in view of Bryan (US 4657959) and Chikuni (US 5786414).

Applicants respectfully traverse both rejections.

[I-A] Advantages of the present invention:

The present invention provides a polyether-containing hydrophilic polyorganosiloxane composition that cures well and that also has an improved stability sufficient to prevent separation out of the polyether component over time. The polyorganosiloxane composition of the present invention cures into a product having satisfactory hydrophilic properties.

In accordance with the present invention, the polyorganosiloxane composition having these beneficial features is obtained by using a curable organopolysiloxane – that is, an organopolysiloxane that has curable or crosslinkable groups such as silicon atom-bonded alkenyl groups for hydrosilylation reaction curing or organic peroxide curing or silanol groups or silicon-atom bonded hydrolysable groups for condensation reaction curing. These curable organopolysiloxanes contain 10 to 50 mol% of diphenylsiloxane units or 20 to 50 mol% of methylphenylsiloxane units in their base polymer. The specified organopolysiloxanes are combined with a polyether to form the presently claimed compositions.

The compositions of this invention cure readily into products that are highly hydrophilic. This hydrophilicity is confirmed by contact angles of up to 55° when measured in accordance with JIS R3257. Even after long term storage, the polyorganosiloxane compositions of the invention resist separation out on the part of the polyether components, both in the uncured and in the cured state. The presently claimed compositions are thus effective for minimizing variations of a coating of aqueous paint applied thereon and also for minimizing variations in impressions made in specimens of the compositions.

[I-B] Torto:

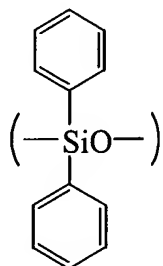
It is curious that Torto has been applied against the inventive claims in the final Office Action dated July 1, 2005 and the rejection based on Torto was withdrawn in the December 28,

2005 Office Action, but has now been reinstated against the claims in the outstanding Office Action dated May 17, 2006.

As was previously argued (and is suspected as being the reason why the Examiner originally withdrew the rejection based on Torto) is that Torto fails to teach or suggest a contact angle of up to 55° as presently claimed.

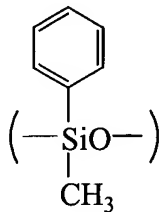
The contact angle of up to 55° is unexpectedly low as compared with a contact angle of 61.1° disclosed in Torto. This shows that Torto fails to disclose or teach the organopolysiloxane has 10 to 50 mol% of diphenylsiloxane unit or 20 to 50 mol% of methylphenylsiloxane unit as a whole of component (A).

The feature of the present invention that 10 to 50 mol% of



the diphenylsiloxane units as a whole of component (A) can impart the criticality on the effect of improving stability sufficient to prevent separation of polyether over time from a cured product having satisfactory hydrophilic property is not expected from Torto.

In this case, the lower limit 10 mol% of the diphenylsiloxane units corresponds to the lower limit 20 mol% of the



methylphenylsiloxane units . Therefore, the criticality

of 20 to 50 mol% of the methylphenylsiloxane units are not expected from Torto either.

With respect to the contact angle of up to 55°, the Examiner relies on the fact that Torto teaches a broad range of less than 80°, see column 14, line 63. However, Torto only shows the skilled artisan how to reduce the contact angle to 61.1° in the Examples (see the table on column 14). Preparing a composition having a contact angle of less than 61.1 degrees appears to be just a wish list for Torto. It is the equivalent to an organic synthetic chemist shooting for a goal of 100% yield. Although, it is theoretically possible to prepare a composition having a contact angle of less than 61.1 degrees, Torto provides no guidance as to how this should be accomplished. References relied upon to support a rejection under 35 USC 103 must provide an enabling disclosure, i.e., they must place the claimed invention in the possession of the public. *In re Brown*, 141 USPQ 245, 249 (1964). An invention is not "possessed" absent some known or obvious way to make it. *In re Hoeksema*, 158 USPQ 596, 601 (1968). Accordingly, Torto does not make the present invention obvious, since the assertion of a goal (preparing a composition having a contact angle of less than 61.1 degrees) with nothing more cannot block patentability for one who achieves that goal.

Accordingly, withdrawal of the rejection (again) based on Torto is respectfully requested.

[I-C] Nitzsche, Bryan and Chikuni:

With respect to Nitzsche, the Examiner asserts that the amount of the phenyl group in Nitzsche's diorganopolysiloxane can be exemplified in Examples, such as Examples 4 and 5 where the amount of phenylmethylsiloxane units can be 24.5 mol% or 45 mol%, and it is obvious to add Bryan's polyether in Nitzsche's composition in order to decrease the water angle of the composition.

However, the silicone rubber stock of Nitzsche is a room temperature vulcanizing silicone rubber composition of condensation reaction curing type in which a hydroxy group-containing diorganopolysiloxane is used as a base polymer and is cured with a hydrolyzable silane compound such as an alkylorthosilicate as a crosslinking agent through

hydrolytic condensation reaction or with an organohydrogenpolysiloxane as a crosslinking agent **through dehydrogenation condensation reaction**.

Accordingly, firstly, Nitzsche does not disclose a hydrosilylation or addition reaction curable polyorganosiloxane composition of claim 1 at all.

Moreover, Nitzsche necessarily uses two base polymers of a hydroxy group-containing diorganopolysiloxane and a triorganosilyl terminated diorganopolysiloxane in combination in order to obtain a low modulus cured product.

In Example 4 of Nitzsche, equal parts of the mixture from containers A and B are used. In this case, 100 parts by weight of dimethylpolysiloxane containing 24.5 mol% of phenylmethylsiloxane unit is contained in the total amount (145 parts by weight) of container A. Therefore, the dimethylpolysiloxane is contained in an amount of 69% by weight in container A. On the other hand, 100 parts by weight of triphenylsilyl end-blocked dimethylpolysiloxane containing 5 mol% of methylvinylsiloxane unit is contained in the total amount (202.5 parts by weight) of container B. Therefore, the dimethylpolysiloxane is contained in an amount of 49% by weight in container B.

Accordingly, the base polymer obtained by mixing containers A and B of Nitzsche in equal amounts **only contains 14.3 mol% of phenylmethylsiloxane unit in all the diorganosiloxane units**, which is outside the inventive range.

With respect to Example 5 of Nitzsche, this is a theoretical example and is not an actual example which has been actually carried out to confirm the effect of the present invention but **is only the hypothetical example which had not been actually carried out**. Furthermore, in the composition of Example 5, the curing catalyst is not specified. Therefore, the skilled artisan would not be motivated to combine Example 5 in which the composition is not definitely specified with the compositions of the other references.

In any event, Nitzsche fails to disclose and suggest the inventive compositions of not only hydrosilylation reaction type but also condensation reaction type which contain 10 to 50 mol% of diphenylsiloxane units or 20 to 50 mol% of methylphenylsiloxane units, especially 10 to 50 mol% of diphenylsiloxane units, and the effect of the present invention. Accordingly, Nitzsche fail to teach all of the elements of the instant claims.

Furthermore, the advantageous features of the presently claimed invention as set forth in the present specification would not be expected from Nitzsche.

Lastly, Bryan '959 and Chikuni '414 fail to cure the deficiencies of Nitzsche as described above.

Accordingly, withdrawal of the rejections is respectfully requested.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, Ph.D., Esq. (Reg. No. 43,575) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for

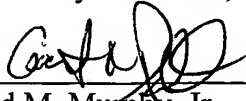
Application No. 10/724,221
Amendment dated August 8, 2006
Reply to Office Action of May 17, 2006

Docket No.: 0171-1044P

any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

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Respectfully submitted,

By  # 43525
Gerald M. Murphy, Jr.
Registration No.: 28,977 for
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant